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Genitourinary medicine and the Internet No 7

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Providing information on the Internet

In the last six issues, I have concentrated on information retrieval on the Internet and provided lists of web sites of interest to the practice of genitourinary medicine. However, because of the low cost of access to the network and the ease with which individuals and groups can self publicise on the web, there is not only great variation in the quality of these resources, but also a scarcity of authoritative information. Furthermore, much of this information is American based. And while some of the HIV related resources are of great interest to medical researchers, the different style of clinical medicine practised in the United States, and particularly genitourinary medicine, makes it difficult to relate to.

The need for relevant, locally sourced content is likely to grow and a number of readers have written in requesting information on how they could publicise the activities of their own clinics or departments on the Internet. This is currently an area of great interest, not only in terms of the steadily increasing uptake and accessibility of the Internet, but also in the development of smaller, private internal networks (intranets) within organisations such as hospital trusts, based on the same principles, protocols, and applications (for example, email, searchable information databases, and web pages) as the Internet. These smaller networks allow users to access and share information which may be specific to that organisation, such as its structure and personnel, as well as patient oriented information, such as the results of laboratory and radiological investigations, clinical protocols, clinic times of outpatient departments, etc. In turn, these intranets can also be connected to the Internet through network gateways.

In view of the current interest in this area, I am devoting this and the next article to addressing the issue of publishing on the Internet and hope that it will provide readers with sufficient knowledge to be aware of its potentials and pitfalls before they decide to be information providers and develop their own web sites.

What type of information?

A department of genitourinary medicine could use the available network technology in many ways. The precise format and the facilities offered will be dependent on a number of factors, but clearly, smaller departments with only a limited number of staff may only wish to publicise a limited amount of information, such as a list of personnel and opening times of the department, and may not have the nec-essary resources or expertise to embark on more ambitious projects. The table lists a range of facilities which could be provided. A number of clinical departments will already have the type of information listed in the table on computer files, and it would be relatively easy to re-edit the information and convert it into HTML (hypertext markup language), ready for publication on the Internet or local intranet. Images from photographs or slides can also be easily converted into a digital format, edited and re-sized using scanners, and incorporated into the web site.

Advantages of the medium

The world wide web offers an enormous advantage over more traditional paper based methods with the ease with which files can be changed and updated. This is relevant not only to providing current information on genitourinary conditions, changes in the day to day running of the clinic, or publicising forthcoming meetings, but also in terms of alerting other medical staff and potential patients to new treatments available or the availability of new therapies in clinical trials.

The structure of the web, which allows users to "point and click" and follow specific hypertext links means that the information is individualised for that particular user. For example, a medical student may only want an overview of a condition such as genital warts, but at a later date may choose to gain a deeper knowledge of the subject through the built in cross references to that subject.

Using a computer network for providing information

Facility	Details
Departmental information	Administration Personnel Contact information Telephone numbers
Clinic information	Location, transport routes, and maps Opening times of clinics Types of clinics and other services provided Referrals
Departmental meetings	Publicising forthcoming meetings and presentations
Research	Publicising research activities and interests Clinical reviews Listing recent publications
Patient information	Explanation of conditions Treatments and side effects Recruitment for clinical trials
Medical education	Lecture notes for medical students Clinical quizzes Medical slide show and other imaging Continuing medical education Audit activity

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By being an electronic form of publication, the web of information provided is relatively cheap and cost effective to maintain. Revisions and updates can be made easily within minutes and uploaded quickly without much disruption, and in the knowledge that all who subsequently view the revised page(s) will be viewing the correct version. Users can also download and save relevant web pages in their personal computers and, within certain copyright constraints, may be allowed to manipulate the information for their own personal needs.

Disadvantages of the medium

Although the Internet has been in existence for over 20 years and has grown virtually exponentially over the past few years, the technology is perceived by many as being relatively new. There is a reluctance by many older medical and nursing staff to use this medium in preference to paper based textbooks or lists. Hard pressed medical staff may baulk at the thought of spending their precious time re-editing or even writing lecture notes for their medical students! There is also concern that patient confidentiality could be compromised by publishing their medical condition to a far wider audience on the web than might be envisaged with a paper textbook.

The audience which accesses the web may not necessarily be the same people attending the department. It will be important not only to publicise the existence of the web site to clinic patients, but also to encourage constructive feedback from as many users as possible to get an idea of their profile and help guide subsequent versions of the pages to the requirements of the audience.

Deciding what to publish on the web is a multidisciplinary enterprise. Cajoling staff for high quality material suitable for publication, assembling for regular meetings, and coordinating their efforts may be additional burdens which may not meet with much enthusiasm.

Finally, the web site has to be maintained and updated regularly. This will involve someone taking overall responsibility for the task and ensuring that user feedback is acted upon.

Coming next: An overview of the requirements for HTML editing and web publishing.